

Sanitation in the Construction Of Modern Trailer Courts

By J. B. THOMAS

AN ESTIMATED 2 million people now use trailers as permanent or temporary living quarters. In all, 83,000 trailers were manufactured in 1952; 62,000, or 74 percent, were built with 2 bedrooms, living room, kitchenette, and complete bath. These mobile units are now used as homes by construction workers, retired persons, and families of men in the military services. Trailers are also used extensively for vacationing.

Public health authorities are concerned with the general sanitation of trailer courts and the health hazards which develop in courts not designed or maintained to serve this transient trade adequately. Since trailers travel all over the country and across our national borders, they offer a rapid mode of disease dissemination. Inadequate water supply, sewage and waste disposal, and insectborne and rodentborne disease can create health hazards which must be considered in the construction of trailer courts. The number of trailer courts regulated by health authorities has not increased in proportion to

the number of mobile units in use. Many sanitation problems occur in trailer parking sites not under regular inspection by local or State health departments.

Several years ago a number of State health departments and representatives of the trailer industry asked the Public Health Service for help in developing sanitary standards and recommended regulations for trailer courts. Early in 1953 the Public Health Service released a pamphlet, *Trailer Court Sanitation With Suggested Ordinances and Regulations (1)*. One of the industry's trade associations assisted in the printing of this publication and in its distribution to the industry.

The Hains Point Court

Such interest was shown in trailer court design and construction that the Office of National Capital Parks, a field agency of the National Park Service, and the Public Health Service became concerned with conditions at the trailer court in East Potomac Park, Washington, D. C. This is the only trailer court within the District of Columbia, and it is part of the Potomac Park Motor Court. It is located on Federal land controlled by the Office of National Capital Parks and is operated by Government Services, Inc., a concessionaire.

A survey of the sanitary conditions in the original court by the superintendent of the Office of National Capital Parks and his en-

Mr. Thomas, an engineer with the Region III office of the Public Health Service in Washington, D. C., is assigned as consultant to the Office of National Capital Parks, National Park Service. He participated in the designing and reconstruction of the trailer court in East Potomac Park, Washington, D. C.

gineers, in company with the Public Health Service consultant assigned to that office, resulted in a decision to reconstruct this court as a model trailer court. Existing conditions were such that it was deemed advisable to make immediate improvements of all facilities. It was further agreed that the building of a court with all modern facilities in the Nation's Capital would greatly assist in promoting improvements in other courts throughout the country. With the assistance of the Public Health Service, it was possible to have all planning and reconstruction adequately supervised and to observe the most modern standards for all sanitary facilities.

Planning the Reconstruction

A local architectural firm was employed by Government Services, Inc., and planning of the new court began in the fall of 1952. The architects, working with the engineers of the Office of National Capital Parks and the Public Health Service consultant, sought to provide not only an attractive court with modern sanitary facilities, but also proper and adequate everyday services such as refuse collection and yard maintenance.

The planning of the new court required more time than might have been considered normal because of the lack of information among the architects, engineers, and mobile unit manufacturers on details of construction which would meet the basic requirements of a modern trailer court serving all types of mobile units. Other problems involved in the planning included the preservation of 24 large trees and the perimeter roadway.

Public water and sewerage facilities were accessible, and sufficient electric power was available. The service building originally provided to accommodate the dependent trailers with lavatory, toilet, and laundry facilities was situated in the adjacent motor court area just outside the limits of the original trailer court, where it could easily serve occupants of the new court. This made a service building in the new court area unnecessary.

Numerous layouts were studied in an effort to provide the maximum possible number of parking spaces without removing any of the



A portion of the new court with service building in background. Small fenced-in enclosure is for refuse cans.

trees and providing adequate depth for parking trailers up to 45 feet in length. Angular parking was determined to be the most satisfactory for the economic utilization of the area, the convenience of the trailer owner in parking, and the appearance of the court.

The selected layout provided 56 trailer spaces for which individual accommodations would have to be provided. The spaces varied in size, but averaged 25 x 40 feet, or 1,000 square feet each. Some variation in width was necessary to keep the trees within the sodded, curbed areas where they would not interfere with roadways nor be too close to the mobile units.

Automobile parking space was provided in the area between the court's perimeter roadway and the shrubbery which screened the entire court. This arrangement was agreed upon as it met fire regulations regarding the spacing of car and trailer and prevented the cluttered appearance found in many trailer courts, where the parking of cars adjacent to the trailers is permitted.

For the many overnight visitors, provisions were made to park without uncoupling cars from trailers. This was accomplished by building a new roadway the full length of the 2-acre tract, dividing the court into two sections. On one side of the new roadway, parking spaces long enough to accommodate car and trailer without uncoupling were constructed. These drive-through parking spaces were open at both ends to facilitate the entry and exit of overnight visitors.

The other section formed by the new roadway provided sufficient area for a double row of angular spaces designed for backing in trailer units and uncoupling the tow cars.

Since the existing court had not been planned to serve modern trailers, it was necessary to remodel completely this entire court in order to comply with safety regulations governing the spacing of mobile home units and tow cars and to provide the required ventilation for all units. Water, sewer, and power connections were essential if the court was to serve the trailer coach of today.

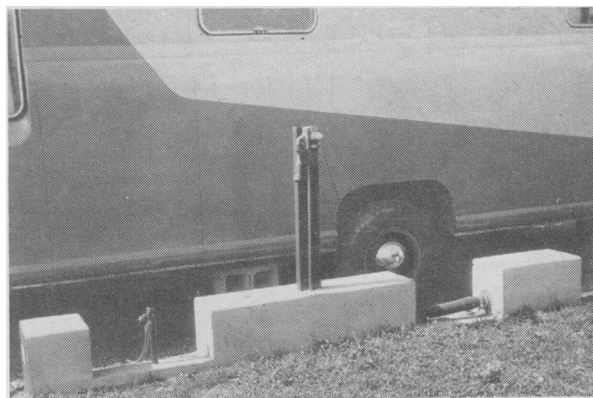
Service Connections

Following a study of the requirements of modern mobile units and numerous meetings with representatives of the industry, it was agreed that certain additions to recent basic recommendations of the Public Health Service (1) were desirable to attain the objective of a model court for the Nation's Capital. The service curb was one such important addition.

The service curb is located on the left (driver's) side of each mobile unit parking space. The curb serves as a guide in parking at any hour of the day or night and provides adequate protection for connections to water, sewer, and electricity. Many modern trailers have been equipped with television sets by their owners. A vertical pipe sleeve placed in the central section of the service curb provides a support for television antennas. This small addition permits all antennas to be uniformly located and avoids the use of hazardous guy wires.

In addition to these merits, the curb, with its definitely located services, should assist in promoting standardization of the location of all connections on the various types of mobile units and result in simplified, efficient, and sanitary connections for all mobile units.

Since freezing weather occurs in the District of Columbia and winter visitors are numerous, frostproof water connections were necessary. To eliminate any possibility of back siphonage in the frostproof hydrant, all weephole bleeds were connected to a return waterline and pump. The return waterline provides a closed system and extends to a pump at the service building, where the water is discharged by way of an



The service curb.

air gap into a plumbing fixture within the building. This method of hydrant drainage provides a complete, protected system whereby the frost-proof hydrant can be used at any time without danger of its freezing. The occupant of the trailer must, however, furnish his own electrical heating tape to prevent the water-service line from hydrant to trailer from freezing.

Careful attention was given to spacing of the water and sewer lines. All sewer services were brought to the service curb from one side and water service from the other. Lateral mains were laid lengthwise of the court at least 10 feet apart. These mains extended from existing mains in the perimeter roadway. Fire hydrants located on the 6-inch mains at each end of the court are within the required 400-foot distance of any trailer.

Sewer connections were carried in 4-inch terra cotta pipe from the 6-inch main to the service curb, where a 3-inch running trap and a 3-inch riser of cast iron were installed. The 90° L at the ground surface was fitted with a threaded brass ferrule where the pipe terminated in the face of the service curb. A brass plug anchored by a chain was provided at each sewer connection so that these openings can be closed when not connected to a mobile unit. The present threaded ferrules provide for 2½-inch connections; however, 3-inch threaded connections can be provided should the need arise. With suitable adapters, it is possible to make satisfactory watertight sanitary connections with any mobile unit parked in the court.

In designing the electrical connections, allowance had to be made for both large and small

mobile units with varying load requirements of refrigerators, radios, television sets, air-conditioning units, and many other appliances. All wiring was placed underground to avoid the unsightliness of poles. Unsightly meter boxes also were eliminated by the use of a metered feeder. The only poles permitted in the court area were those for street lighting, which were of attractive design. Individual 30-ampere circuits supplied current to each space with 2- and 3-wire cords and waterproof outlets. Separate load centers were located at various service curbs throughout the court. These load centers were so placed that no mobile unit would be more than 50 feet from its circuit breaker. All outlets and locked circuit-breaker boxes are adequately protected from damage by being located in the center of the service curb.

Refuse Storage and Collection

Refuse collection services were already provided in the adjoining motor court. Extending this service to the new trailer court was a simple matter. However, adequate storage facilities were necessary for both garbage and rubbish, which had to be collected separately. For appearance and durability, as well as for simplicity in cleaning, racks for the garbage cans were built with concrete pedestals and were enclosed in metal fences. These metal fences have a removable side. The lid of each can is chained to the fence. This assures the lid's availability at all times to protect the contents of the can from flies, abate odor nuisance, and also avoid excessive damage to the lid by its being thrown around on the ground. A frost-

proof hydrant, as previously described for the individual trailer spaces, was provided at each rack. A waste-water drain to the sewer is provided at each hydrant, and the pedestal is sloped to drain so that the entire refuse-can area can be easily hosed down and maintained in a sanitary condition. This hydrant also provides water for general use and for hose connections for lawn sprinkling.

Approval and Construction

Final plans were completed in December 1952, and work was started on the reconstruction of the court in January 1953. Since the Public Health Service had worked directly with all concerned in the planning of the court and since it was to be constructed by a Federal agency, approval of the plan by local health authorities was not necessary.

The low elevation of the area and heavy spring rains retarded construction and delayed the reopening of the court. After ground construction was completed, including wiring, storm sewers, and storm water-catch basins, and the concrete for the service curbs was poured, the roadways were resurfaced and unpaved areas were sodded. The paving and sodding were completed by the middle of August, and the court was officially opened for occupancy on September 1, 1953.

REFERENCE

- (1) Public Health Service: Trailer court sanitation. Chicago, Ill., Mobile Homes Manufacturers' Assn., 1953.

